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### REMARKS

Claims 1-32 are pending. Independent claims 1, 9, 19, 24, 30, 31, and 32, have been amended by the present amendment. A Notice of Appeal is concurrently filed herewith. Attorney for the Assignee respectfully requests consideration and entry of the amendments and allowance of the pending claims.

#### **I. THE 103(a) REJECTION OF CLAIMS 1-6, 8-15, 7-20, 22-32**

On page 3, the Office Action has rejected claims 1-6, 8-15, 7-20 and 22-32 under 35 U.S.C. § 102(b) as unpatentable under 35 U.S.C. 102(b) by U.S. Patent No. 5,476,438 to Edrich ("*Edrich*") in view of U.S. Patent No. 5,556,372 to Talish ("*Talish*"). Assignee for the Attorney assumes this rejection was made under 35 U.S.C. 103(a) rather than 35 U.S.C. 102(b), and respectfully traverses this 103(a) rejection and requests consideration of the amended claims.

Independent claims 1, 9, 19, 24, 30, 31, and 32 have been amended. Specifically, claims 1 and 9 have been amended with the element, "wherein the at least one electromagnetic coil is adapted to be selectively positioned to vary the modulated ultrasound energy." Claim 19 has been amended with the element, "selectively positioning the at least one electromagnetic coil to vary the modulating force to modulate said ultrasonic waves." Claim 24 now includes the element, "means for selectively positioning an electromagnetic coil associated with the electromagnetic field to vary the modulation of said ultrasound wave." Claims 30, 31, and 32 now include the element, "wherein either said at least one ultrasonic

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transducer or said at least one electromagnetic coil can be selectively positioned relative to the other to vary the amount of modulation of the energy.” (underlining supplied). These amendments are supported by the Specification on at least page 20, line 3 – page 21, line 2. Modulation of the ultrasound by the electromagnetic field can stimulate cellular permeability and the diffusion of ions within a traumatized tissue or osteochondrial injury to accelerate healing.

Each of the above amended elements are neither taught nor suggested by the cited references. Neither *Talish* nor *Edrich* show an electromagnetic coil being selectively positioned to vary the modulating force. Figure 3 of *Edrich* merely shows a 90 degree relationship between the coils 7 ultrasound source 1. Figure 3 and the accompanying description also disclose the use of a synchronizer 18, driver 17, and delay 19 to perform frequency and phase control. While the position of the coils and ultrasound source shown in Figure 3 can optimize the focus of the ultrasound waves, there is no structure or element to selectively position the coil to vary the amount of the modulation of the energy. Specifically, Figure 3 of *Edrich* does not teach or suggest the amended elements, “wherein the at least one electromagnetic coil is adapted to be selectively positioned to vary the modulated ultrasound energy;” “selectively positioning the at least one electromagnetic coil to vary the modulating force to modulate said ultrasonic waves;” “means for selectively positioning an electromagnetic coil associated with the electromagnetic field to vary the modulation of said ultrasound wave;” and “wherein either said at least one ultrasonic transducer

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or said at least one electromagnetic coil can be selectively positioned relative to the other to vary the amount of modulation of the energy.” (underlining supplied).

Furthermore, Col. 4, lines 7-10 of *Edrich* merely state that “[t]he waveforms and relationships of the applied ultrasound and magnetic waves should be properly adjusted to achieve maximum optimum performance. This can be derived from the induced electric field  $E_x$ , which follows from the gradient of the voltage  $V$  according to equations (1) (2) as .... where  $\lambda$  is the wavelength of the ultrasound in the tissue medium.” This statement and the associated equations (1), (2), and (5) relate to achieving optimum performance by adjusting voltage, power density, ultrasound velocity, wavelength, and frequency of the ultrasound and magnetic waves, but do not teach or suggest selectively positioning the electromagnetic coil to vary the modulated ultrasound energy. Specifically, the statement in *Edrich* does not teach or suggest the amended elements, “wherein the at least one electromagnetic coil is adapted to be selectively positioned to vary the modulated ultrasound energy;” “selectively positioning the at least one electromagnetic coil to vary the modulating force to modulate said ultrasonic waves;” “means for selectively positioning an electromagnetic coil associated with the electromagnetic field to vary the modulation of said ultrasound wave;” and “wherein either said at least one ultrasonic transducer or said at least one electromagnetic coil can be selectively positioned relative to the other to vary the amount of modulation of the energy.” (underlining supplied).

For at least the reasons above, the obviousness rejection is believed to be traversed. An allowance of the amended independent claims is requested.

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### CONCLUSION

For at least the reasons given above, it is respectfully submitted that amended independent claims 1, 9, 19, 24, 30, 31, and 32, define patentable subject matter in view of the amendments and remarks made above. Further, it is respectfully requested that immediate allowance of all the pending claims 1-32 and notice thereof be issued. Should the Examiner believe that anything further is necessary in order to place the application in better condition for allowance, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below. The Commissioner is hereby authorized to charge any deficiencies or credit any overpayment to Deposit Order Account No. 11-0855.

Respectfully submitted,



Christopher J. Chan  
Reg. No. 44,070

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KILPATRICK STOCKTON LLP  
1100 Peachtree Street  
Suite 2800  
Atlanta, Georgia 30309-4530  
(404) 815-6500 (main)  
(404) 815-6555 (fax)  
Attorney Docket No. 41482/205541

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## II. OBVIOUSNESS REJECTION

On pages 7, the Office Action has rejected claims 7, 16 and 21 under 35 U.S.C. § 103(a) as being unpatentable over *Edrich* in view of *Talish* in further view of U.S. Patent No. 6,050,943 to Slayton ("*Slayton*"). Since these claims are dependent on at least one of the independent claims 1, 9, 19, 24, 30-32, for which arguments of patentability have been advanced above, the dependent claims should also be allowable over the cited art.

## III. OBJECTIONS TO THE SPECIFICATION

On page 2, the Office Action objects to the limitations in claims 30-32 including the term "selectively biased" and "selectively biasing." These terms were respectively changed to "selectively positioned" and/or "selectively positioning" in a prior filed amendment submitted on November 15, 2004. Attorney for the Assignee requests confirmation that the amendments submitted on November 15, 2004 were entered and considered by the Examiner. The currently amended claims still include the previously amended terms "selectively positioned" and "selectively positioning." Support for these terms can be found in the Specification on at least page 20, line 3 – page 21, line 2.